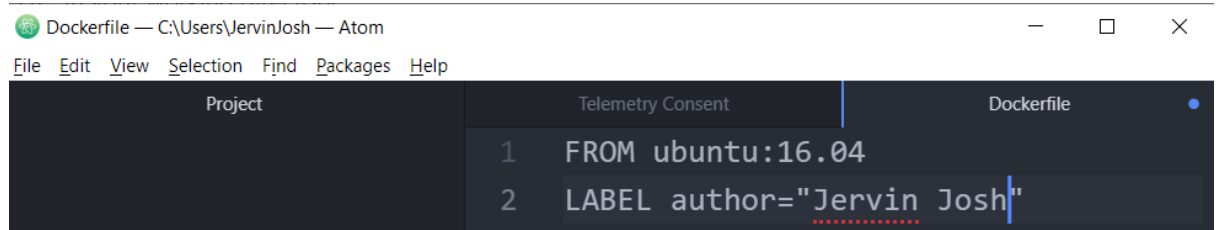


Creating a dockerfile

1. Creating dockerfile using touch (used git bash since touch was having problems in windows command prompt)

```
JervinJosh@DESKTOP-P31T5DQ MINGW64 ~  
$ touch Dockerfile
```

2. Adding FROM and LABEL



3. Adding RUN commands

```
FROM ubuntu:16.04  
LABEL author="Jervin Josh"  
  
RUN apt-get update  
  
RUN apt-get install -y iputils-ping
```

Building the Dockerfile

Building the image

```
JervinJosh@DESKTOP-P31T5DQ MINGW64 ~  
$ docker build -t 'jervinjosh68/ping' .  
#2 [internal] load .dockerignore  
#2 sha256:e4bc1cb8c2a6408c8ae3346f5320733887c2cf8c83903c6330d48c42617d5e93  
#2 transferring context: 2B 0.0s done  
#2 DONE 0.1s  
  
#1 [internal] load build definition from Dockerfile  
#1 sha256:5255965dd0c4c912838aa3273a3c7f686012a8a60ed32e2d8938141f88755a5a  
#1 transferring dockerfile: 145B 0.0s done  
#1 DONE 0.2s
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
jervinjosh68/ping	latest	2a9bd54502a1	8 minutes ago	170MB
ubuntu	16.04	9ff95a467e45	3 weeks ago	135MB
ubuntu	latest	7e0aa2d69a15	6 weeks ago	72.7MB

Optimizing the Dockerfile

```
$ docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
jervinjosh68/ping   latest       c69e017b9ba8     8 seconds ago   170MB
```

```
FROM ubuntu:16.04
LABEL author="Jervin Josh"

RUN apt-get update \
    && apt-get install -y iputils-ping \
    && apt-get clean \
    && cd /var/lib/apt/lists && rm -fr *Release* *Sources* *Packages* \
    && truncate -s 0 /var/log/*log
```

After the new build,

```
$ docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
jervinjosh68/ping   latest       3ba986ab1357     3 hours ago     139MB
```

Other Dockerfiles directives

```
FROM ubuntu:16.04
LABEL author="Jervin Josh"

ENV PING_TARGET "google.com"

RUN apt-get update \
    && apt-get install -y iputils-ping \
    && apt-get clean \
    && cd /var/lib/apt/lists && rm -fr *Release* *Sources* *Packages* \
    && truncate -s 0 /var/log/*log

CMD ["sh", "-c", "ping $PING_TARGET"]
```

```
C:\Users\JervinJosh>docker run -it jervinjosh68/ping
PING google.com (142.250.66.110) 56(84) bytes of data.
64 bytes from 142.250.66.110: icmp_seq=1 ttl=37 time=25.9 ms
64 bytes from 142.250.66.110: icmp_seq=2 ttl=37 time=24.6 ms
64 bytes from 142.250.66.110: icmp_seq=3 ttl=37 time=24.3 ms
^C\Users\JervinJosh>docker build -t jervinjosh68/ping .
--- google.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 24.387/24.998/25.914/0.684 ms
```